What is claimed is:

1. An optoelectronic device, which comprises:

a semiconductor substrate, the semiconductor substrate including an active surface and a back surface, the back surface opposing the active surface;

at least one light emitting diode junction, the at least one light emitting diode junction being formed on the semiconductor substrate;

an ultraviolet-curable adhesive layer, the ultraviolet-curable adhesive layer being deposited on at least a portion of the active surface;

an ultraviolet-transparent insulative layer, the ultraviolet-transparent insulative layer being positioned on the ultraviolet-curable adhesive layer, the ultraviolet-curable adhesive layer being cured by passing ultraviolet radiation through the ultraviolet-transparent insulative layer, the ultraviolet-curable adhesive layer bonding the ultraviolet-transparent insulative layer to at least a portion of the active layer in response to being cured; and

electrically conductive material, the electrically conductive material being deposited on the back surface of the semiconductor substrate, the electrically conductive material forming at least one contact, the at least one contact being operatively connected to the at least one light emitting diode junction.

2. An optoelectronic device as defined by Claim 1, wherein the semiconductor substrate is less than about 0.005 ohms/cm.

3. An optoelectronic device as defined by Claim 1, wherein the semiconductor substrate is about 25-50 μm in thickness.

4. An optoelectronic device as defined by Claim 1, further comprising a buffer layer, the buffer layer being positioned between the semiconductor substrate and the at least one light emitting diode junction.

5. An optoelectronic device as defined by Claim 4, wherein the buffer layer includes silicon gallium nitride.

6. An optoelectronic device as defined by Claim 4, wherein the buffer layer is about 0.15-2 μm in thickness.

7. An optoelectronic device as defined by Claim 1, wherein the at least one light emitting diode junction includes a gallium nitride layer and a P+ layer.

8. An optoelectronic device as defined by Claim 7, wherein the gallium nitride layer is about 0.1-1 μm in thickness.

9. An optoelectronic device as defined by Claim 7, wherein the P+ layer is about .1-1 μm in thickness.

10. An optoelectronic device as defined by Claim 1, further comprising at least one passivation layer, the at least one passivation layer being positioned between the semiconductor substrate and the ultraviolet-curable adhesive layer.

11. An optoelectronic device as defined by Claim 10, wherein the at least one passivation layer includes silicon oxide (SiO2) and is about 3000 Å in thickness.

12. An optoelectronic device as defined by Claim 10, wherein the at least one passivation layer includes silicon nitride (Si_3N_4) and is about 1000 Å in thickness.

13. An optoelectronic device as defined by Claim 1, further comprising an isolation trench, the isolation trench being positioned in the active surface of the semiconductor substrate.

14. An optoelectronic device as defined by Claim 13, wherein the isolation trench is filled with a glass slurry including at least one of zinc, boron, and aluminum.

15. An optoelectronic device as defined by Claim 13, wherein the isolation trench includes sides, the sides being fabricated to be at least one of about 90° and 52° with respect to the back surface of the semiconductor surface.

16. An optoelectronic device as defined by Claim 13, wherein the isolation trench is about 150 μm in width.

17. An optoelectronic device as defined by Claim 13, wherein the semiconductor substrate includes a first N+ via and a second N+ via, the isolation trench being positioned between the first N+ via and the second N+ via.

18. An optoelectronic device as defined by Claim 17, wherein the first N+ via is less than about .006 ohms/cm.

19. An optoelectronic device as defined by Claim 17, wherein the second N+ via is less than about .005 ohms/cm.

20. An optoelectronic device as defined by Claim 17, further comprising an interconnecting beam, the at least one light emitting diode junction including a P+ layer, the interconnecting beam operatively connecting the first N+ via of the semiconductor substrate to the P+ layer of the at least one light emitting diode junction.

21. An optoelectronic device as defined by Claim 20, wherein the interconnecting beam is about 3000 Å in thickness.

22. An optoelectronic device as defined by Claim 7, further comprising a P+ contact, the P+ contact being operatively connected to the P+ layer of the at least one light emitting diode junction.

23. An optoelectronic device as defined by Claim 7, further comprising a shorting ring, the semiconductor substrate including a second N+ via, the shorting ring operatively connecting the gallium nitride layer of the at least one light emitting diode junction to the second N+ via of the semiconductor substrate.

24. An optoelectronic device as defined by Claim 23, wherein the gallium nitride layer of the at least one light emitting diode junction includes a stepped surface, the shorting ring being deposited on the stepped surface.

25. An optoelectronic device as defined by Claim 1, wherein the ultraviolet-transparent insulative layer includes glass.

26. An optoelectronic device as defined by Claim 1, wherein the ultraviolet-transparent insulative layer is about 250 μm in thickness.

27. An optoelectronic device as defined by Claim 1, wherein the ultraviolet-curable adhesive layer is about 12-25 μm in thickness.

28. An optoelectronic device as defined by Claim 1, wherein the at least one contact is about 3000 Å in thickness.

29. An optoelectronic device as defined by Claim 1, wherein the at least one contact includes at least one of titanium, platinum, and gold.

30. An optoelectronic device as defined by Claim 1, wherein at least one light emitting diode junction includes a forward bias voltage requirement, the forward bias voltage requirement being less than or equal to about 3.2 volts.

31. An optoelectronic device as defined by Claim 1, wherein the semiconductor substrate is silicon.

32. An optoelectronic device as defined by Claim 1, further comprising at least one phosphor coating, the at least one phosphor coating being applied to the ultraviolet-transparent insulative layer, thereby enabling light of a selectable color to be emitted from the optoelectronic device.

33. An optoelectronic device as defined by Claim 32, wherein the selectable color is substantially white.

34. An optoelectronic device as defined by Claim 1, wherein the at least one light emitting diode junction emits light having a wavelength of about 450 nm.

35. A method of fabricating an optoelectronic device, which comprises the steps of:

forming at least one light emitting diode junction on a semiconductor substrate, the semiconductor substrate including an active surface and a back surface, the back surface opposing the active surface;

depositing an ultraviolet-curable adhesive layer on at least a portion of the active surface;

positioning an ultraviolet-transparent insulative layer on the ultraviolet-curable adhesive layer;

curing the ultraviolet-curable adhesive layer by passing ultraviolet radiation through the ultraviolet-transparent insulative layer, the ultraviolet-curable adhesive layer bonding the ultraviolet-transparent insulative layer to at least a portion of the active layer in response to being cured; and

depositing electrically conductive material on the back surface of the semiconductor substrate, the electrically conductive material forming at least one contact, the at least one contact being operatively connected to the at least one light emitting diode junction.

36. A method of fabricating an optoelectronic device as defined by Claim 35, further comprising the step of forming a buffer layer, the buffer layer being formed between the semiconductor substrate and the at least one light emitting diode junction.

37. A method of fabricating an optoelectronic device as defined by Claim 35, wherein the step of forming at least one light emitting diode junction includes the steps of:

forming a gallium nitride layer; and

forming a P+ layer.

38. A method of fabricating an optoelectronic device as defined by Claim 35, further comprising the step of forming at least one passivation layer, the at least one passivation layer being formed between the semiconductor substrate and the ultraviolet-curable adhesive layer.

39. A method of fabricating an optoelectronic device as defined by Claim 35, further comprising the step of forming an isolation trench, the isolation trench being formed in the active surface of the semiconductor substrate.

40. A method of fabricating an optoelectronic device as defined by Claim 39, further comprising the step of filling the isolation trench with an insulative filler.

41. A method of fabricating an optoelectronic device as defined by Claim 39, further comprising the step of thinning the semiconductor substrate until at least a portion of the isolation trench appears through the back surface of the semiconductor substrate, the semiconductor substrate including a cathode region and an anode region, the isolation trench substantially separating the cathode region and the anode region in the semiconductor substrate.

42. A method of fabricating an optoelectronic device as defined by Claim 39, further comprising the steps of:

forming a first N+ via in the semiconductor substrate; and

forming a second N+ via in the semiconductor substrate, the isolation trench being positioned between the first N+ via and the second N+ via.

43. A method of fabricating an optoelectronic device as defined by Claim 42, further comprising the step of forming an interconnecting beam, the at least one light emitting diode junction including a P+ layer, the interconnecting beam operatively connecting the first N+ via of the semiconductor substrate to the P+ layer of the at least one light emitting diode junction.

44. A method of fabricating an optoelectronic device as defined by Claim 37, further comprising the step of forming a P+ contact, the P+ contact being operatively connected to the P+ layer of the at least one light emitting diode junction.

45. A method of fabricating an optoelectronic device as defined by Claim 37, further comprising the step of depositing a shorting ring, the semiconductor substrate including a second N+ via, the shorting ring operatively connecting the gallium nitride layer of the at least one light emitting diode junction to the second N+ via of the semiconductor substrate.

46. A method of fabricating an optoelectronic device as defined by Claim 45, further comprising the step of forming a stepped surface on the gallium nitride layer of the at least one light emitting diode junction, the shorting ring being deposited on the stepped surface.

47. A method of fabricating an optoelectronic device as defined by Claim 35, further comprising the step of forming at least one phosphor coating on the ultraviolet-transparent insulative layer.

48. An optoelectronic device, which comprises:

a semiconductor substrate, the semiconductor substrate including an active surface and a back surface, the back surface opposing the active surface;

at least one light emitting diode junction, the at least one light emitting diode junction being formed on the semiconductor substrate, the at least one light emitting diode junction including a gallium nitride layer and a P+ layer;

an ultraviolet-curable adhesive layer, the ultraviolet-curable adhesive layer being deposited on at least a portion of the active surface;

an ultraviolet-transparent insulative layer, the ultraviolet-transparent insulative layer being positioned on the ultraviolet-curable adhesive layer, the ultraviolet-curable adhesive layer being cured by passing ultraviolet radiation through the ultraviolet-transparent insulative layer, the ultraviolet-curable adhesive layer bonding the ultraviolet-transparent insulative layer to at least a portion of the active layer in response to being cured;

electrically conductive material, the electrically conductive material being deposited on the back surface of the semiconductor substrate, the electrically conductive material forming a first contact and a second contact;

an isolation trench, the isolation trench being positioned in the active surface of the semiconductor substrate, the semiconductor substrate including a first N+ via and a second N+ via, the isolation trench being positioned between the first N+ via and the second N+ via, the first N+ via being connected to the first contact, the second N+ via being connected to the second contact;

an interconnecting beam, the interconnecting beam operatively connecting the first N+ via of the semiconductor substrate to the P+ layer of the at least one light emitting diode junction;

a P+ contact, the P+ contact being operatively connected to the P+ layer of the at least one light emitting diode junction; and

a shorting ring, the shorting ring operatively connecting the gallium nitride layer of the at least one light emitting diode junction to the second N+ via of the semiconductor substrate, the gallium nitride layer of the at least one light emitting diode junction including a stepped surface, the shorting ring being deposited on the stepped surface.

49. An optoelectronic device as defined by Claim 48, further comprising at least one phosphor coating, the at least one phosphor coating being applied to the

ultraviolet-transparent insulative layer, thereby enabling light of a selectable color to be emitted from the optoelectronic device.